

Serial No.: 10/535,310
 Attorney's Docket No.: 28955.1049

RECEIVED
 CENTRAL FAX CENTER
 MAY 26 2009

IN THE CLAIMS:

1. (Currently Amended) An organic electroluminescence element comprising:
 an anode;
 a first emitting layer comprising at least a first host material and a first dopant;
 a second emitting layer comprising at least a second host material and a second dopant;

[[and]]

an electron injecting layer; and

a cathode in the order mentioned,

wherein the energy gap E_{gh1} of the first host material, the energy gap E_{gd1} of the first dopant, the energy gap E_{gh2} of the second host material, and the energy gap E_{gd2} of the second dopant satisfy the following formulas [i] to [iv];

the luminescent intensity $I1$ at the maximum luminescent wavelength of an emission spectrum derived from the first emitting layer, and the luminescent intensity $I2$ at the maximum luminescent wavelength of an emission spectrum derived from the second emitting layer satisfy the following formula [v]; and

~~the affinity level A_d1 of the first dopant and the affinity level A_d2 of the second dopant satisfy the following formula:~~

the electron mobility of the electron injecting layer is $10^{-4} \text{ cm}^2/(\text{V} \cdot \text{sec})$ or more;

$$E_{gh1} > E_{gd1} \quad [i]$$

$$E_{gh2} > E_{gd2} \quad [ii]$$

$$E_{gd1} > E_{gd2} \quad [iii]$$

$$E_{gd1} > 2.7 \text{ eV} \quad [iv]$$

$$I1 > 3.5 \times I2 \quad [v]$$

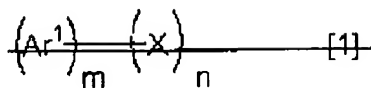
$$A_d1 < A_d2;$$

~~at least one of the first host material and the second host material is a compound~~

Serial No.: 10/535,310

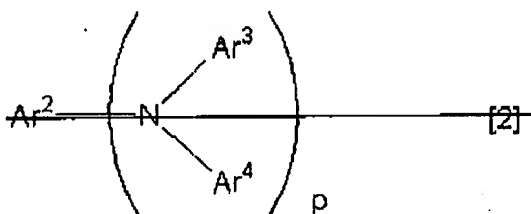
Attorney's Docket No.: 28955.1049

represented by a formula [1]:



wherein Ar^1 is an aromatic ring with 6 to 50 nucleus carbons, X is a substituent, m is an integer of 1 to 5 and n is an integer of 0 to 6, provided that when m is 2 or more, the plurality of Ar^1 may be the same as or different from each other, and when n is 2 or more, the plurality of Xs may be the same as or different from each other; and

at least one of the first dopant and the second dopant is a compound represented by a formula [2]:



wherein each of Ar^2 to Ar^4 is a substituted or unsubstituted aromatic group with 6 to 50 nucleus carbons, or a substituted or unsubstituted styryl group; and p is an integer of 1 to 4; provided that when p is 2 or more, the plurality of Ar^3 and Ar^4 may be the same as or different from each other.

2. (Original) An organic electroluminescence element according to claim 1, wherein the following formula is satisfied:

$$\text{I1} > 5 \times \text{I2}.$$

Serial No.: 10/535,310
Attorney's Docket No.: 28955.1049

3. (Previously Presented) An organic electroluminescence element according to claim 1, wherein E_{g2} is more than 2.7 eV.
4. (Cancelled)
5. (Previously Presented) An organic electroluminescence element according to claim 1, wherein the ratio of the first dopant to the first host material is 0.1 to 10 mol% in the first emitting layer.
6. (Previously Presented) An organic electroluminescence element according to claim 1, wherein the ratio of the second dopant to the second host material is 0.1 to 10 mol% in the second emitting layer.
7. (Cancelled)
8. (Previously Presented) An organic electroluminescence element according to claim 1, wherein the first host material is the same as the second host material.
9. (Cancelled)
10. (Previously Presented) An organic electroluminescence element according to claim 1, wherein the first emitting layer has a film thickness of 10 nm or more.
11. - 12. (Cancelled)

Serial No.: 10/535,310

Attorney's Docket No.: 28955.1049

13. (Currently Amended) An organic electroluminescence element according to claim [[12]] 1, wherein the electron injecting layer comprises one or more organic compounds comprising a nitrogen-containing heterocyclic derivative.

14. (Currently Amended) An organic electroluminescence element according to claim [[13]] 10, wherein the organic compound(s) is/are an imidazopyrazine derivative and/or an imidazole derivative.

15. (Currently Amended) The organic electroluminescence element according to claim [[1]] 19, wherein Ar¹ is selected from the group consisting of phenyl, naphthyl, anthracene, acenaphthylene, fluorene, phenanthrene, fluoranthene, triphenylene, pyrene, chrysene, perylene, and trinaphthylene; and

X is selected from the group consisting of substituted or unsubstituted aromatic groups with 6 to 50 nucleus carbons, substituted or unsubstituted aromatic heterocyclic groups with 5 to 50 nucleus carbons, substituted or unsubstituted alkyl groups with 1 to 50 carbons, substituted or unsubstituted alkoxy groups with 1 to 50 carbons, substituted or unsubstituted aralkyl groups with 1 to 50 carbons, substituted or unsubstituted aryloxy groups with 5 to 50 nucleus atoms, substituted or unsubstituted arylthio groups with 5 to 50 nucleus atoms, substituted or unsubstituted carboxyl groups with 1 to 50 carbons, substituted or unsubstituted styryl groups, halogen groups, a cyano group, a nitro group, and a hydroxyl group.

16. (Cancelled)

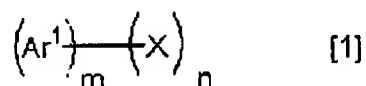
Serial No.: 10/535,310

Attorney's Docket No.: 28955.1049

17. (Currently Amended) The organic electroluminescence element according to claim [[1]] 20, wherein each of Ar² to Ar⁴ is selected from the group consisting of phenyl, 1-naphthyl, 2-naphthyl, 9-phenanthryl, 1-naphthacenyl, 2-naphthacenyl, 9-naphthacenyl, 1-pyrenyl, 2-pyrenyl, 4-pyrenyl, 2-biphenyl, 3-biphenyl, 4-biphenyl, o-tolyl, m-tolyl, p-tolyl, p-t-butylphenyl, 2-fluorenyl, 9,9-dimethyl-2-fluorenyl, ~~3-fluorantenyl~~ 3-fluoranthenyl, 2-phenyl-1-vinyl, 2,2-diphenyl-1-vinyl, and 1,2,2-triphenyl-1-vinyl.

18. (Currently Amended) The organic electroluminescence element according to claim 4, wherein each of Ar² to Ar⁴ is selected from the group consisting of phenyl, 1-naphthyl, 2-naphthyl, 9-phenanthryl, 1-naphthacenyl, 2-naphthacenyl, 9-naphthacenyl, 1-pyrenyl, 2-pyrenyl, 4-pyrenyl, 2-biphenyl, 3-biphenyl, 4-biphenyl, o-tolyl, m-tolyl, p-tolyl, p-t-butylphenyl, 2-fluorenyl, 9,9-dimethyl-2-fluorenyl, ~~3-fluorantenyl~~ 3-fluoranthenyl, 2-phenyl-1-vinyl, 2,2-diphenyl-1-vinyl, and 1,2,2-triphenyl-1-vinyl.

19. (New) The organic electroluminescence element according to claim 1, wherein at least one of the first host material and the second host material is a compound represented by a formula [1]:

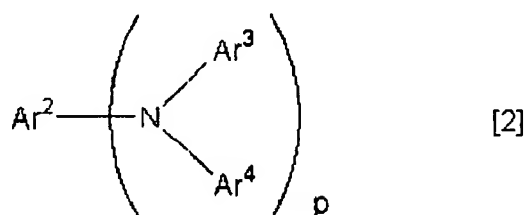


wherein Ar¹ is an aromatic ring with 6 to 50 nucleus carbons, X is a substituent, m is an integer of 1 to 5 and n is an integer of 0 to 6, provided that when m is 2 or more, the plurality of Ar¹ may

Serial No.: 10/535,310
Attorney's Docket No.: 28955.1049

be the same as or different from each other, and when n is 2 or more, the plurality of Xs may be the same as or different from each other.

20. (New) The organic electroluminescence element according to claim 1, wherein at least one of the first dopant and the second dopant is a compound represented by a formula [2]:



wherein each of Ar^2 to Ar^4 is a substituted or unsubstituted aromatic group with 6 to 50 nucleus carbons, or a substituted or unsubstituted styryl group; and p is an integer of 1 to 4; provided that when p is 2 or more, the plurality of Ar^3 and Ar^4 may be the same as or different from each other.